BioXyTran® Inc.

Tissue Regeneration For Life

Frequently Asked Questions

Q: WHAT IS A STROKE?

A: Stroke is a medical emergency and a leading cause of death in the U.S. It occurs when a blood vessel in the brain bursts or, more commonly, when a blockage develops. Without treatment, cells in the brain quickly begin to die. The result can be serious disability or death.

Q: STROKE SYMPTOMS

A: Sudden numbness or weakness of the body, especially on one side. Sudden vision changes in one or both eyes, or difficulty swallowing. Sudden, severe headache with unknown cause. Sudden problems with dizziness, walking, or balance. Sudden confusion, difficulty speaking or understanding others.

Q: WHAT CAUSES A STROKE, AND WHAT TYPES ARE THERE?

A: A common cause of stroke is atherosclerosis -- hardening of the arteries. Plaque made of fat, cholesterol, calcium, and other substances builds up in the arteries, leaving less space for blood to flow. A blood clot may lodge in this narrow space and cause an ischemic stroke. Atherosclerosis also makes it easier for a clot to form. Hemorrhagic strokes often result from uncontrolled high blood pressure that causes a weakened artery to burst. Certain chronic conditions increase your risk of stroke. These include: High blood pressure, High cholesterol, Diabetes, Obesity.

Q: HOW LONG DOES IT TAKE TO DETERMINE WHAT TYPE OF STROKE IT IS?

A: When someone with stroke symptoms arrives in the ER, the first step is to determine which type of stroke is occurring. There are two main types and they are not treated the same way. A CT scan can help doctors determine whether the symptoms are coming from a blocked blood vessel or a bleeding vessel. Additional tests may also be used to find the location of a blood clot or bleeding within the brain. It can take up to 4 hours to make a proper diagnosis.

Q: WHEN BRAIN CELLS DIE DUE TO A LACK OF OXYGEN, CAN THE DAMAGE BE REVERSED OR, CAN DAMAGE BE MITIGATED?

A: The most common type of stroke is known as an ischemic stroke. About 80% of the strokes fall into this category. The culprit is a blood clot that obstructs a blood vessel inside the brain. The clot may develop on the spot or travel through the blood from elsewhere in the body. If your stroke is diagnosed soon enough after the start of symptoms, you may be given a clot-dissolving medicine called tissue plasminogen activator (t-PA), which can increase your chances of recovery. You may also receive aspirin or another antiplatelet medicine. In some cases, a procedure may be done to restore blood flow. The doctor uses a thin, flexible tube (catheter) and a tiny cage to remove the blood clot that caused the stroke. It's the diagnoses of the 15% hemorrhagic strokes, that delays treatment. Use of blood thinners in that type of stroke can be fatal.

Q: WHEN A STROKE VICTIM IS GIVEN OXYGEN, DOES THAT MEAN IT GETS INTO THE BRAIN WHERE IT'S NEEDED?

A: No, the oxygen is delivered by the Red Blood Cells. The red blood cells are blocked by the clot in the case of the majority of ischemic strokes

Q: CAN BXT-25 BE ADMINISTERED BY EMERGENCY MEDICAL TECHNICIANS, AND DOES IT DELIVER OXYGEN TO THE BRAIN MORE EFFICIENTLY THAN A RED BLOOD CELL?

A: BXT-25 can be administered by Emergency Medical Technicians. Since the molecule is 1/5000 the size of the red blood cells it can penetrate the blood brain barrier and the clot. The clot will prevent a red blood cell from going through and as a consequence no oxygen is delivered to the blocked part of the brain.

Q: IS BXT-25 A BLOOD THINNER, AND CAN IT BE USED IN HEMORRHAGIC STROKES?

A: BXT-25 is not a blood thinner. It can be used also without risk in hemorrhagic strokes.

Q: HOW QUICKLY TO TREAT A STROKE VICTIM HAVE TO LESSEN DAMAGE CAUSED BY A LACK OF OXYGEN TO THE BRAIN?

A: For an ischemic stroke, emergency treatment focuses on medicine to restore blood flow. A clot busting drug is highly effective at dissolving clots and minimizing long-term damage, but it must be as soon as possible. Hemorrhagic strokes are more difficult to manage. Treatment usually involves attempting to control high blood pressure, bleeding, and brain swelling.

Q: CAN THE DAMAGE BE MITIGATED AFTER 3-4 HOURS OF NOT BEING TREATED?

A: Whether a stroke causes long-term damage depends on its severity and how quickly treatment stabilizes the brain. The type of damage depends on where in the brain the stroke occurs. Common problems after a stroke include numbness and/or weakness in the arms or legs, difficulty walking, vision problems, trouble swallowing, and problems with speech and comprehension. These problems can be permanent, but some people regain partially their abilities.

Q: HOW EFFECTIVE ARE DRUGS USED IN TREATING STROKES?

A: There are a 1/2 dozen drugs that can be used after the fact of a stroke. None are given during the immediate hours of occurrence, until it is determined what type of stroke it is. None of the currently available drugs deliver oxygen to the brain.

Q: ARE THERE SPECIALISTS AND HOSPITALS THAT TREAT STROKE VICTIMS?

A: Today, there are more than 640 primary stroke centers certified by The Joint Commission (a private non-profit organization that provides certification programs for health care organizations, including hospitals) operating in 49 states and the District of Columbia, said Jean Range, The Joint Commission executive director of Disease-Specific Care Certification. Stroke, that is an acute situation is treated by EMT's and physicians in the emergency room. However, "stroke specialists" don't exist, because days after the stroke, the patient begins rehabilitative care.

Q: IN TIME AND WITH PHYSICAL AND SPEECH THERAPY CAN A STROKE PATIENT GET BACK TO NORMAL?

A: Yes, You Can Fully Recover from Stroke. And it's all about attitude. The key is to overcome the mental obstacles that are holding you back. If you believe in certain limitations to your recovery, then you're limiting your own success. There are many of stories about stroke survivors who triumphantly recover more of their abilities than their doctors and therapists thought. And, it's because they put their mind to it.